

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2005-23809; Directorate Identifier 2005-NE-52-AD; Amendment 39-14795; AD 2006-21-10]

RIN 2120-AA64

Airworthiness Directives; Turbomeca Arriel 2B Series Turboshift Engines

AGENCY: Federal Aviation Administration (FAA), Department of Transportation (DOT).

ACTION: Final rule.

SUMMARY: The FAA is adopting a new airworthiness directive (AD) for Turbomeca Arriel 2B, 2B1, and 2B1A turboshaft engines. This AD requires visually inspecting the splines of the high-pressure (HP) pump drive gear shaft and coupling shaft assembly for wear. This AD results from reports of uncommanded in-flight shutdowns of engines. We are issuing this AD to detect wear on the splines of the HP pump drive gear shaft and coupling shaft assembly, which could interrupt the fuel flow and cause an uncommanded in-flight shutdown of the engine on a single-engine helicopter. The in-flight shutdown of the engine could result in a forced autorotation landing or accident.

DATES: This AD becomes effective November 24, 2006. The Director of the Federal Register approved the incorporation by reference of certain publications listed in the regulations as of November 24, 2006.

ADDRESSES: You can get the service information identified in this AD from Turbomeca, 40220 Tarnos-France; Tel (33) 05 59 74 40 00; Telex 570 042; Fax (33) 05 59 74 45 15.

You may examine the AD docket on the Internet at <http://dms.dot.gov> or in Room PL-401 on the plaza level of the Nassif Building, 400 Seventh Street, SW., Washington, DC.

FOR FURTHER INFORMATION CONTACT: Christopher Spinney, Aerospace Engineer, Engine Certification Office, FAA, Engine and Propeller Directorate, 12 New England Executive Park, Burlington, MA 01803; telephone (781) 238-7175; fax (781) 238-7199.

SUPPLEMENTARY INFORMATION: The FAA proposed to amend 14 CFR part 39 with a proposed AD. The proposed AD applies to Turbomeca Arriel 2B, 2B1, and 2B1A turboshaft engines. We published the proposed AD in the Federal Register on March 9, 2006 (71 FR 12150). That action

proposed to require visually inspecting the splines of the HP pump drive gear shaft and coupling shaft assembly for wear.

Examining the AD Docket

You may examine the docket that contains the AD, any comments received, and any final disposition in person at the Docket Management Facility Docket Office between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The Docket Office (telephone (800) 647-5227) is located on the plaza level of the Department of Transportation Nassif Building at the street address stated in ADDRESSES. Comments will be available in the AD docket shortly after the DMS receives them.

Comments

We provided the public the opportunity to participate in the development of this AD. We received no comments on the proposal or on the determination of the cost to the public.

Conclusion

We have carefully reviewed the available data and determined that air safety and the public interest require adopting the AD as proposed.

Costs of Compliance

We estimate that this AD will affect 107 engines installed on helicopters of U.S. registry. We also estimate that it will take about 1.0 work-hours per engine to perform the actions, and that the average labor rate is \$65 per work-hour. There are no required parts. Based on these figures, we estimate the total cost of the AD to U.S. operators to be \$6,955.

Authority for This Rulemaking

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. Subtitle VII, Aviation Programs, describes in more detail the scope of the Agency's authority.

We are issuing this rulemaking under the authority described in subtitle VII, part A, subpart III, section 44701, "General requirements." Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

Regulatory Findings

We have determined that this AD will not have federalism implications under Executive Order 13132. This AD will not have a substantial direct effect on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify that this AD:

- (1) Is not a "significant regulatory action" under Executive Order 12866;
- (2) Is not a "significant rule" under DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979); and

(3) Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

We prepared a summary of the costs to comply with this AD and placed it in the AD Docket. You may get a copy of this summary at the address listed under ADDRESSES.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

Adoption of the Amendment

Accordingly, under the authority delegated to me by the Administrator, the Federal Aviation Administration amends 14 CFR part 39 as follows:

PART 39—AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

2. The FAA amends § 39.13 by adding the following new airworthiness directive:

AIRWORTHINESS DIRECTIVE

www.faa.gov/aircraft/safety/alerts/
www.gpoaccess.gov/fr/advanced.html

U.S. Department
of Transportation
**Federal Aviation
Administration**



2006-21-10 Turbomeca: Amendment 39-14795. Docket No. FAA-2005-23809; Directorate Identifier 2005-NE-52-AD.

Effective Date

- (a) This airworthiness directive (AD) becomes effective November 24, 2006.

Affected ADs

- (b) None.

Applicability

- (c) This AD applies to Turbomeca Arriel 2B, 2B1, and 2B1A turboshaft engines. These engines are installed on, but not limited to, Eurocopter AS350B3 and EC130B4 helicopters.

Unsafe Condition

- (d) This AD results from reports of uncommanded in-flight shutdowns of engines. We are issuing this AD to detect wear on the splines of the high-pressure (HP) pump drive gear shaft and the coupling shaft assembly, which could interrupt the fuel flow and cause an uncommanded in-flight shutdown of the engine on a single-engine helicopter. The in-flight shutdown of the engine could result in a forced autorotation landing or accident.

Compliance

- (e) You are responsible for having the actions required by this AD performed within the compliance times specified unless the actions have already been done.

Initial Visual Inspection

- (f) Perform an initial visual inspection of the splines of the coupling assembly and the HP pump drive gear shaft for wear. Use 2.A. through 2.C.(2) of the Instructions to be Incorporated of Turbomeca Mandatory Service Bulletin (MSB) No. 292 73 2812, Update No. 2, dated June 28, 2005, as follows:

(1) For hydraulic mechanical units (HMUs) that have accumulated 450 or more hours time-since-new (TSN) or time-since-overhaul (TSO) on the effective date of this AD, inspect within 50 hours after the effective date of this AD. Replace the HMU if worn beyond limits.

(2) For HMUs that have fewer than 450 hours TSN or TSO on the effective date of this AD, inspect after accumulating 450 hours TSN or TSO, but before accumulating 500 hours TSN or TSO. Replace the HMU if worn beyond limits.

Repetitive Visual Inspections

(g) Thereafter, perform a visual inspection of the splines of the coupling shaft assembly and the HP pump drive gear shaft for wear every time you remove or install the HMU. Use 2.A. through 2.C.(2) of the Instructions to be Incorporated of Turbomeca MSB No. 292 73 2812, Update No. 2, dated June 28, 2005. Replace the HMU and coupling shaft assembly if worn beyond limits.

Alternative Methods of Compliance

(h) The Manager, Engine Certification Office, has the authority to approve alternative methods of compliance for this AD if requested using the procedures found in 14 CFR 39.19.

Related Information

(i) DGAC airworthiness directive F-2005-188, dated November 23, 2005, also addresses the subject of this AD.

Material Incorporated by Reference

(j) You must use Turbomeca Mandatory Service Bulletin No. 292 73 2812, Update No. 2, dated June 28, 2005, to perform the visual inspections required by this AD. The Director of the Federal Register approved the incorporation by reference of this service bulletin in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Contact Turbomeca, 40220 Tarnos–France; Tel (33) 05 59 74 40 00; Telex 570 042; Fax (33) 05 59 74 45 15, for a copy of this service information. You may review copies at the FAA, New England Region, Office of the Regional Counsel, 12 New England Executive Park, Burlington, MA; or at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030, or go to: <http://www.archives.gov/federal-register/cfr/ibr-locations.html>.

Issued in Burlington, Massachusetts, on October 12, 2006.
Thomas A. Boudreau,
Acting Manager, Engine and Propeller Directorate, Aircraft Certification Service.
[FR Doc. E6-17326 Filed 10-18-06; 8:45 am]